# Hyperinflation in Venezuela: How to Address the Problem

Sean Gregory Reilly

HMN 679HA/B
Special Honors in the Department of Humanities
The University of Texas at Austin

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Brian Roberts
Department of Government
Supervising Professor

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Kenneth Greene
Department of Government
Second Reader

# Abstract

## *Hyperinflation in Venezuela: How to Address the Problem*

Sean Gregory Reilly, BA in Humanties & Economics
The University of Texas at Austin, 2020
Supervisor: Brian Roberts

Massive amounts of hyperinflation have been ravaging Venezuela for years. Forbes reported that the annual inflation rate for Venezuela in 2018 was 80,000%. To put this in perspective, an inflation rate this high doubles prices nearly every two weeks. Inflation rates this high haven't been seen since Zimbabwe in the 2000s and Germany in the 1920s. Venezuela's high inflation levels are due to the sum total effect of relying too heavily on imports for basic goods, depending on oil as its main export, inefficient government industries, and governmental corruption.

While this would have been enough to warrent a thesis on its own, there is more to the story of hyperinflation in Venezuela. Beneath the current economic crisis is a political power struggle. On one side is the current President Nicolas Maduro, head of the United Socialist Party of Venezuela. Challenging him is the interim President of the National Assembly Juan Guaido, from the Popular Will party. To complicate matters further, the United States officially recognized Guaido as the legitimate president of Venezuela. The intersectionality of econoimcs and politics is what intrigued me about Venezuela's situation.

As I started research, I learned that the easiest method for fighting hyperinflation, dollarization, is politically unavailable to President Maduro. Doing so would be seen as a sign of defeat for the leader who has spent so much time denouncing the United States. From here, I started to expand my search for other ways in which Venezuela might be able to fix its economy.

In my thesis, I aim to detail what hyperinflation is, where it has occurred in the past, and the solutions those countries employed to get their economies back on track. I will then explore how Venezuela got to the point it is today in regards to their inflation rate and how the solutions previously examined might be successful or unsuccessful. With increasing tensions between the U.S. and Venezuela, it will be interesting to examine how the unique political situation of Venezuela affects the options for remedying the hyperinflation of the country. I will analyze both the economic as well as the political viability of any and all proposed solutions to the Venezuelan situation.

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# CHAPTER ONE

## General Economic Theory of Hyperinflation

### Introduction

Shortages of food, medicine, and other basic necessities. Hungry people in the streets. Anything left on the shelves has become unimaginably expensive. Although this sounds like the beginning of a horror story, it's not. This is the reality of the situation in Venezuela, and has been for years. With the crash of oil prices in 2014, Venezuela found itself in the midst of an economic crisis. The value of its currency, the Bolivar, became worthless. If this wasn't bad enough, due to poor monetary decisions the country also faces a widespread humanitarian crisis. These two crises negatively affect each other, and are the result of the economic principle known as hyperinflation. The country of Venezuela and its citizens need help in the form of a plan to stabilize this hyperinflation.

This paper aims to explain what hyperinflation is, how it has been treated in the past, and how those options relate to the specific situation in Venezuela. While many papers discuss hyperinflation in general, where hyperinflation has occurred, or a single method Venezuela could use to address its own hyperinflation, none have done so altogether. Understanding the economic theory behind hyperinflation is critical to understanding how it is caused and how it is fixed. Knowing what solutions have been implemented in the past shines a light on the options Venezuela should consider. Analyzing these options in the political context of the country is of the utmost importance. The fact that President Nicolás Maduro is vehemently against the capitalistic nature of the United States and its support of interim President Juan

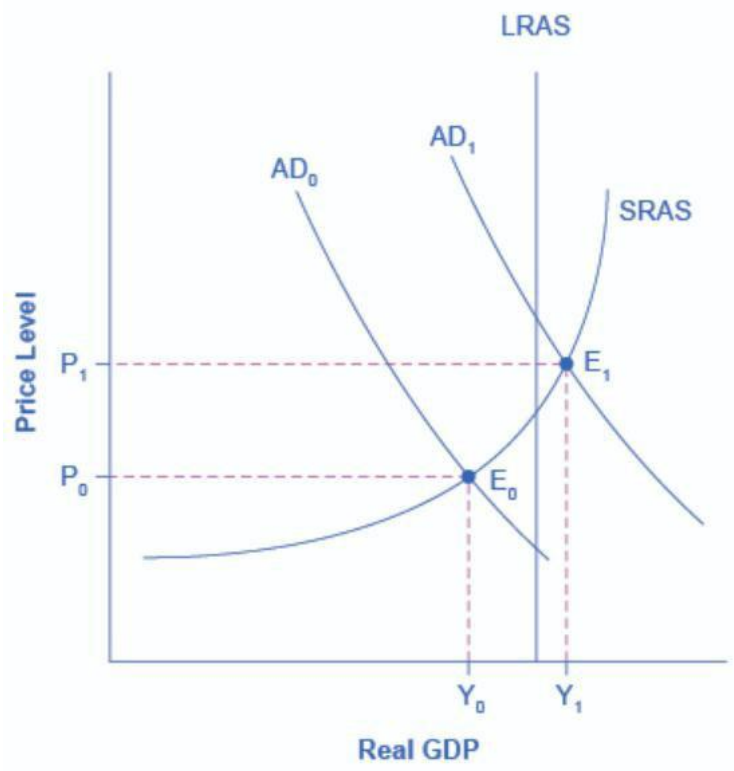
Guaidó severely limits the solutions at the country's disposal. Any proposed economic plan must be politically viable for Maduro. Without a proper plan that is both politically feasible and economically sustainable, the citizens of Venezuela will continue to suffer and the hyperinflation of the Bolivar will remain rampant.

**What is Inflation?**

To understand hyperinflation, one must first understand standard inflation. According to Ceyda Öner, from the International Monetary Fund (IMF), inflation "is the rate of increase in prices over a given period of time" (2020; IMF.org). In other words, inflation measures how much more expensive a given bundle of goods became over some period of time.

Economists describe two types of inflation: demand-pull inflation and cost-push inflation. Demand-pull inflation occurs when aggregate demand grows at an unsustainable rate leading to increased pressure on scarce resources and a positive output gap (Riley 2020). The excess demand allows producers to increase their profit margins by raising prices. Demand-pull inflation can be caused by a depreciation in the exchange rate, fast growth in other countries, higher demand from a fiscal stimulus, or, and the most relevant to hyperinflation, monetary stimulus to the economy. Increasing the amount of money in the money supply leads to a decrease in interest rates which increases demand (Riley 2020). This can lead to "too much money chasing too few goods" according to economist and Fellor of the Royal Society of Arts Geoff Riley (2020; tutor2u.net). Figure 1 illustrates how a rising aggregate demand due to, for example, a growth in the money supply leads to higher prices, inflation.

**Figure 1: Demand-Pull Inflation**[1]



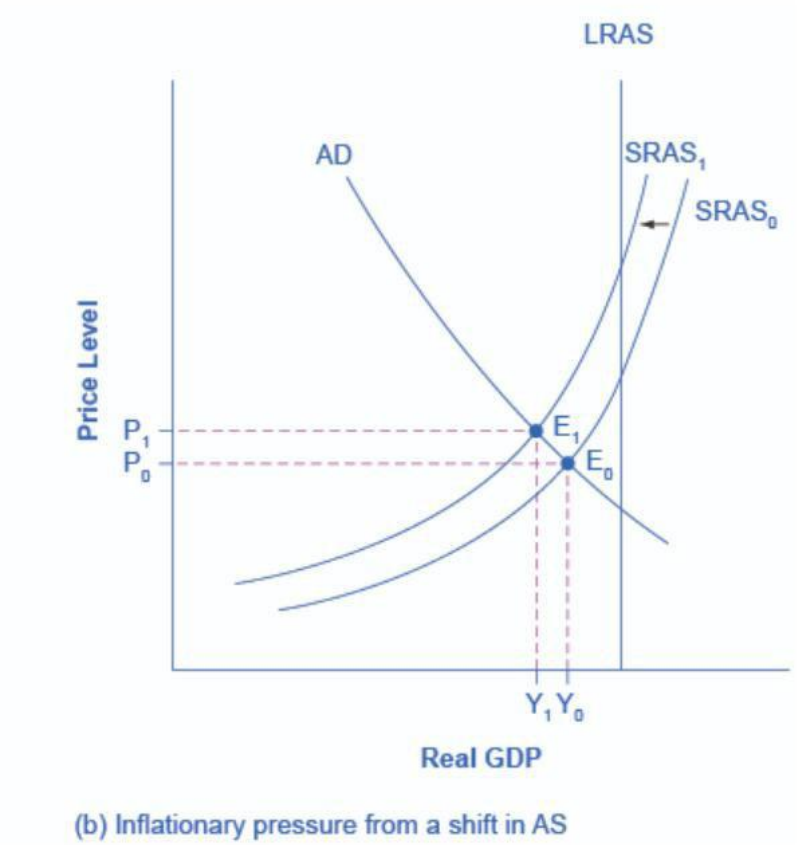

(a) Inflationary pressure from a shift in AD

Cost-push inflation occurs when firms raise prices to protect their profit margins from rising input costs. Cost-push inflation can be caused by increases in component costs, higher indirect taxes, a fall in the exchange rate, monopoly employers, or, and the most important to hyperinflation, rising labor costs and expectations of inflation (Riley 2020). According to Geoff Riley, a key principle of inflation is that peoples' expectation of inflation can push inflation in that direction (2020; tutor2u.net). For example, if people expect higher future inflation, inflation will be pushed in that direction. This is due to the fact that workers will request pay raises to combat rising inflation in order to protect their standard of living. This

[1] Figure 1 reproduced from Khan Academy; "How the AD/AS Model Incorporates Growth, Unemployment, and Inflation (Article)."

increases labor costs causing an upward shift in the short run aggregate supply (Riley 2020). Figure 2 demonstrates how a shift in aggregate supply, such as when labor costs increase, results in higher prices.

**Figure 2: Cost-Push Inflation Graph**[2]



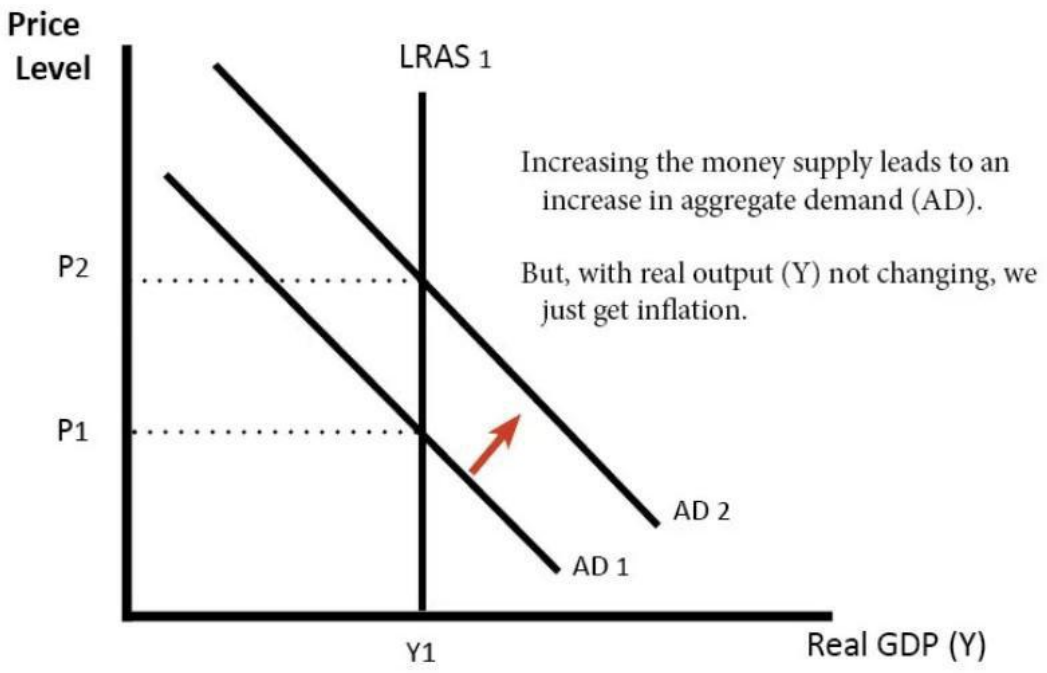

**Going From Inflation to Hyperinflation**

A normal amount of inflation, according to the Federal Reserve, is around 2% or less (2011; Federalreserve.gov). This allows for an economy to grow at a healthy rate. Hyperinflation, as defined by Phillip Cagan in his path-breaking 1956 article, *"The Monetary Dynamics of Hyperinflation"*, is inflation that exceeds 50% per month. Although he notes that this number is arbitrary, the overall idea is that when hyperinflation is occurring prices are rising rapidly. This is usually caused by

[2] Figure 2 reproduced from Khan Academy; "How the AD/AS Model Incorporates Growth, Unemployment, and Inflation (Article)."

excessive increases in the money supply, demand-pull inflation. When the money supply increases at the same rate as real output, the economy will grow by increasing prices and output. However, economies are assumed to be operating at full employment output. This is why the long run aggregate supply curve is vertical. Unless there are improvements in the technologies of production, the long run aggregate supply curve does not move. This is why hyperinflation from printing money has such a dramatic effect on prices. The more money the government prints, the more worthless the money becomes since prices will continue to rise.

**Figure 3: Hyperinflation Due to Printing Money and LRAS[3]**



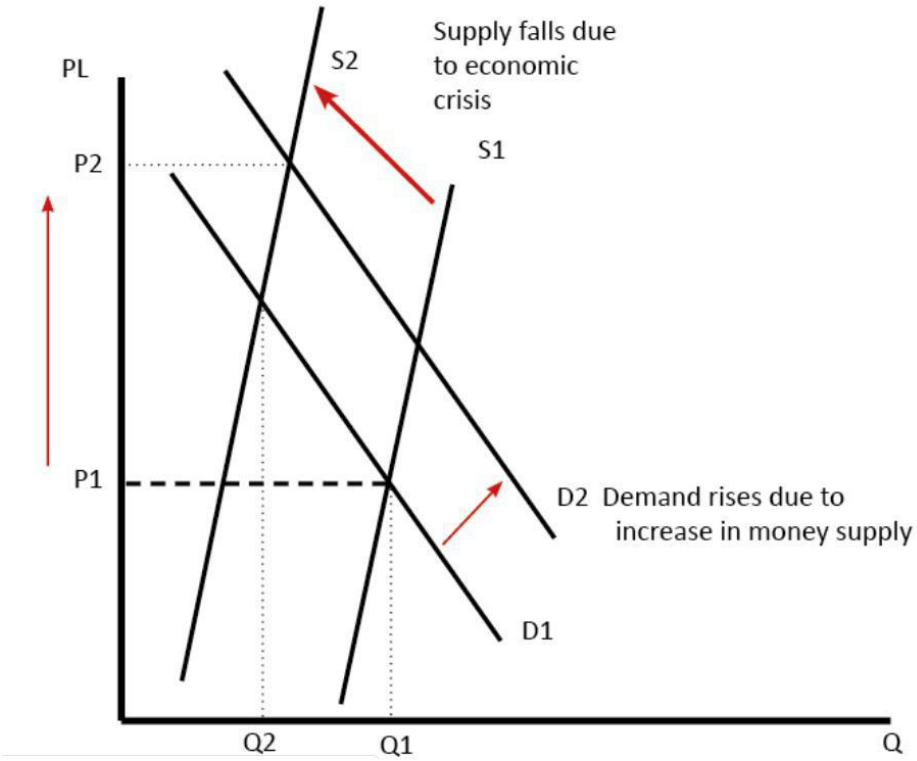

Although Figure 3 looks just like the demand-pull inflation from Figure 1, the difference is the removal of the short run aggregate supply curve. This is necessary as hyperinflation takes place in the long run, meaning there is no increase in output from

[3] Figure 3 reproduced from Economics Help; "The Link between Money Supply and Inflation."

printing money.

As a government prints more and more money, which it might for a variety of reasons, the value of that money becomes less and less. This has indirect effects on the price level besides directly increasing prices. As mentioned before, in order to protect their standard of living, workers will demand higher wages, causing cost-push inflation. In addition to this, as the people of the country observe the rising inflation, they begin to expect more future inflation. As Phillip Cagan has said, "Hyperinflation, if driven by rising expectations of inflation rather than rising money growth, can become a self-generating process" (1989, Pg. 182).

**Figure 4: The Hyperinflation Cycle**[4]




As can be seen in Figure 4, increases in the money supply raises the price level

[4] Figure 4 reproduced from Economics Help; "The Link between Money Supply and Inflation."

more than the amount the increase in aggregate demand would have on its own. This is likely what is happening behind the scenes in Figure 3. Figure 3 is the end result but Figure 4 shows how it happens from a short run perspective.

## Conclusion

The economic knowledge detailed in this chapter will underlie everything that the future chapters discuss. Usually, increasing aggregate demand is a sign of economic growth. However, when it is caused by demand-pull inflation it can lead to economic disaster. Understanding that demand-pull inflation can be caused by the over-printing of currency and how cost-push inflation can add to the price increase is critical to understanding hyperinflation. This is what has caused the hyperinflations in the examples that will be studied in Chapter Two, and is what has caused Venezuela's hyperinflation.

# CHAPTER TWO

## Hyperinflation in the Past

To better understand the situation in Venezuela with regards to its own hyperinflation, it is beneficial to examine where hyperinflation has occurred in the past, why it occurred, and how it was addressed. This paper will explore three examples: Zimbabwe in the mid-2000s, Bolivia in the mid-1980s, and Bulgaria in the late 1990s. Though there are many examples of hyperinflation throughout history, most are caused by wartime disturbances. Famously, Germany experienced hyperinflation after World War II, but that instance will not be discussed here. Instead, the examples listed above are the closest in relevance to the situation in Venezuela.

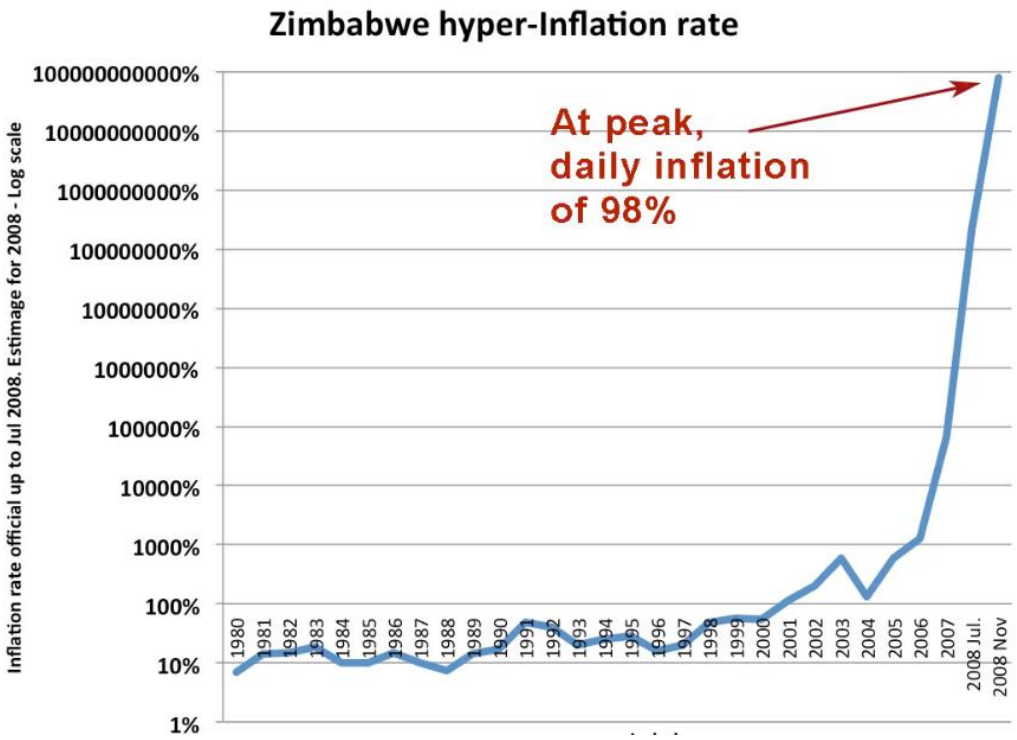
The hyperinflation in Venezuela was caused by overly expansive monetary policy and the subsequent over-printing of the country's currency. Each of the chosen examples display a different way to successfully combat hyperinflation. This gives deeper insight into the options available to Venezuela in terms of finding a solution. The applicability of each solution will be analyzed in Chapter Four: Possible Solutions for Addressing Hyperinflation in Venezuela.

### Zimbabwe's Road to Hyperinflation

After gaining its independence in 1980, the government of Zimbabwe began massive land reforms to shift commercial farm land ownership away from the white community towards the black community. The compulsory buying programs needed for this reform led to the beginning of their economy's downfall. In 1997, the government passed a new pension plan for war veterans. The problem with both the

land acquisition process and the new pension plan was that neither was budgeted. Not to mention, a proposed 1998 bill to increase taxes was struck down due to public outcry. This left the economy of Zimbabwe in complete disarray. International aid had been cut off and foreign reserves were depleting. All the government could do was print more money (Coomer & Gstraunthaler 2011). As the new millennium began, a series of failed price controls only exacerbated the issue. These price controls were removed in 2003, but only after foreign aid had been completely cut off and foreign currency shortages hit an all time high. In a bid to increase public confidence in the Zimbabwean dollar, the government attempted "Project Sunrise" in 2006. This project consisted of replacing the old Zimbabwean dollar for a new Zimbabwean dollar at a ratio of 1000:1 in an attempt to make prices more understandable. The failure of this plan became obvious in the March of 2007, when Zimbabwe's month-to-month inflation reached 50.54%. Under Cagan's definition of hyperinflation, the country had formally entered into hyperinflation. By the next year, the rate of inflation increase made it so that shops had to charge double the cash price for someone paying by check due to the time delay of the check clearing. Furthermore, bank withdrawals were limited to ZW$100 billion, less than the price of a loaf of bread. At its peak in September of 2008, the hyperinflation of Zimbabwe reached a reported 500 billion percent (Coomer & Gstraunthaler 2011).

**Figure 5: Zimbabwe's Hyperinflation[5]**




**Zimbabwe's Solution: Dollarization**

Figure 5 shows Zimbabwe's struggle with inflation from 1980 to 2003. This inflation skyrocketed to become hyperinflation in 2004. According to Steve Hanke, the founder of the Institute for Applied Economics, Global Health, and the Study of Business Enterprise at Johns Hopkins University:

> The source of Zimbabwe's hyperinflation is the Reserve Bank of Zimbabwe's money machine. The government spends, and the RBZ finances the spending by printing money. The RBZ has no ability in practice to resist the government's demands for cash. Accordingly, the RBZ cannot hope to regain credibility anytime soon. To stop hyperinflation, Zimbabwe needs to immediately adopt a different monetary system (2008; CATO.org).

Dollarization is the process in which a country abandons its domestic currency in favor of a foreign currency. In 2009, the Minister of Finance gave legal tender status to the South African Rand and the U.S. dollar, officially dollarizing Zimbabwe. This

[5] Figure 5 reproduced from Economics Help; "Hyper Inflation in Zimbabwe."

completely turned the economy of the country around. According to Coomer and Gstraunthaler, “Dollarization helped stabilize prices, improve revenue performance, and, perhaps most importantly, helped impose fiscal discipline on the authorities” (2011; Pg. 332).

**Bolivia’s Road to Hyperinflation**

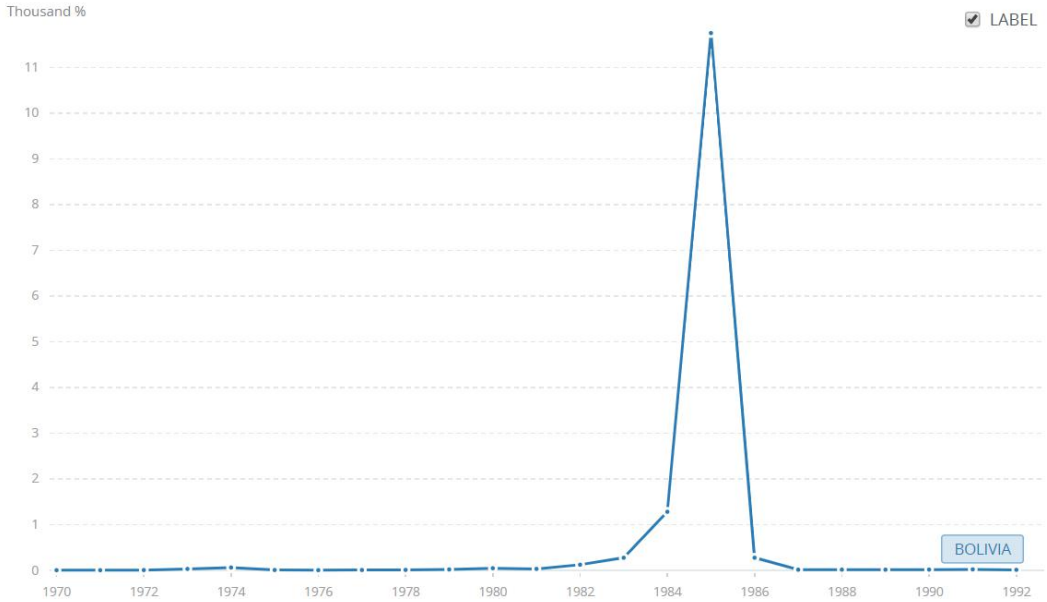
According to Jeffrey Sachs, the Director of the UN Sustainable Development Solutions Network, “A bewildering series of coups, electoral stalemates, and interim governments led to a remarkable turnover of heads of state after 1978,” (1987; Pg. 279). By the end of 1980, Bolivia had lost access to private international capital markets. Shortly thereafter, the IMF and World Bank ceased lending (Sachs 1987). Due to all this and more, the public budget began to run more and more of a deficit. This deficit accounted for around 10% of Gross Domestic Product. At first, these deficits were covered by foreign credit; however, access to new foreign lines of credit became harder and harder to come by because of the growing amount of foreign debt (Bernholz 1988). To keep up with its own spending, the government printed more money, priming the economy for hyperinflation.

The hyperinflation Bolivia experienced during 1984 and 1985 was the most rapid inflation faced by any Latin American country at the time and one of the greatest in world history. The hyperinflation specifically lasted from April of 1984 to the September of 1985, with peak rates reaching 60,000% during its final months (Sachs 1987). Like with all earlier instances of hyperinflation, according to Peter Bernholz from the Journal of Institutional and Theoretical Economics, “the Bolivian hyperinflation was caused by public budget deficits financed by an inflationary increase of the monetary base,” (1988; Pg. 747). This means that the government

printed too much money too quickly in order to make up for the difference between what they spent and how much money they actually had. However, unlike previous examples of hyperinflation, Bolivia was one of only a few countries able to end its hyperinflation with successful monetary reform (Bernholz 1988).

## Bolivia's Solution: Currency Reform

**Figure 6: Bolivia's Hyperinflation[6]**




As can be seen from Figure 6, at its peak, Bolivia reached an annual inflation rate of over 11,000%. The reason for the decline of inflation in 1985 was Presidential Decree No. 21060, a four point currency reform to stabilize the Bolivian Peso at the time, initiated by President Paz Estenssoro. As described by Bernholz, the four steps of the plan were:

> (1) to freeze wages and investments in the public sector, (2) to reduce employment in the public sector by about 10%, (3) to dismantle several public firms, and (4) to increase the price of oil products and of other publicly produced goods and services at least to their international level, thus raising public revenues rapidly (1988; Pg. 748-749).

[6] Figure 6 reproduced from The World Bank; "Inflation, Consumer Prices (Annual %) - Bolivia."

The plan also increased the exchange rate by 500%. This increased public revenues by increasing demand for the country's exports. Furthermore, the plan removed all exchange controls and abolished the indexation of wages while liberalizing all goods, credit, capital, and labor markets. This liberalization meant that the free market would determine prices and wages. Immediately the plan began to work as the budget deficit dropped from 30.61% in 1984 to 1.51% of Gross National Product (GNP) in 1985. This drastically reduced the amount of money that needed to be created to finance the deficit, which was the main source of hyperinflation.

It is important to note that, while the price level almost immediately stabilized, unemployment first increased and GNP was 15% lower than what it was back in 1970. This suggests that currency reform, even when successful, is not the end of a country's economic woes (Bernholz 1988). This is important because, as according to Bernholz, "This understandably engenders political pressures, [causing] labor unrest and strikes to change the monetary and fiscal policies which were so successful in fighting inflation," (1988, Pg. 768). It is crucial that a country undergoing currency reform understands the negative whiplash effects that will face. If it can continue with the reform past these short-term consequences, then the economy will naturally come back under control.

It should be noted that on January 1, 1987 the government of Bolivia issued a new currency, the Boliviano, at a rate of 1 Bolivian to 10,000,000 Pesos. However, by this time hyperinflation had already been brought back under control. Importantly, this shows that the introduction of a new currency is not a necessary condition for successful currency reform. It might help restore confidence but is not necessary for success (Bernholz 1988).

**Bulgaria's Road to Hyperinflation**

After the Soviet Bloc was disbanded, many former Communist countries, including Bulgaria, found themselves in an economic transition period. With this transition came the restructuring, or closing down, of state-owned firms, bad loans, financial bailouts of banks, and foreign debt. The Bulgarian case of hyperinflation is special in that it was a combination of banking, fiscal, and currency crises, any one of which could have led to the downward spiral that was observed in the late 1990s (Dobrinsky 2000).

The banking crisis was due to a mixture of a new wave of bad loans in 1995 and weak banking supervision and improper banking practices, including corruption. With most of the population's savings in the banking system, public confidence in the banks, which was vital to their stability up to this point, eroded. Starting with the banks most affected by liquidity problems, panic soon began to spread as several banks closed. By mid-1996, the whole banking system was collapsing and experiencing major withdrawals of deposits (Dobrinsky 2000).

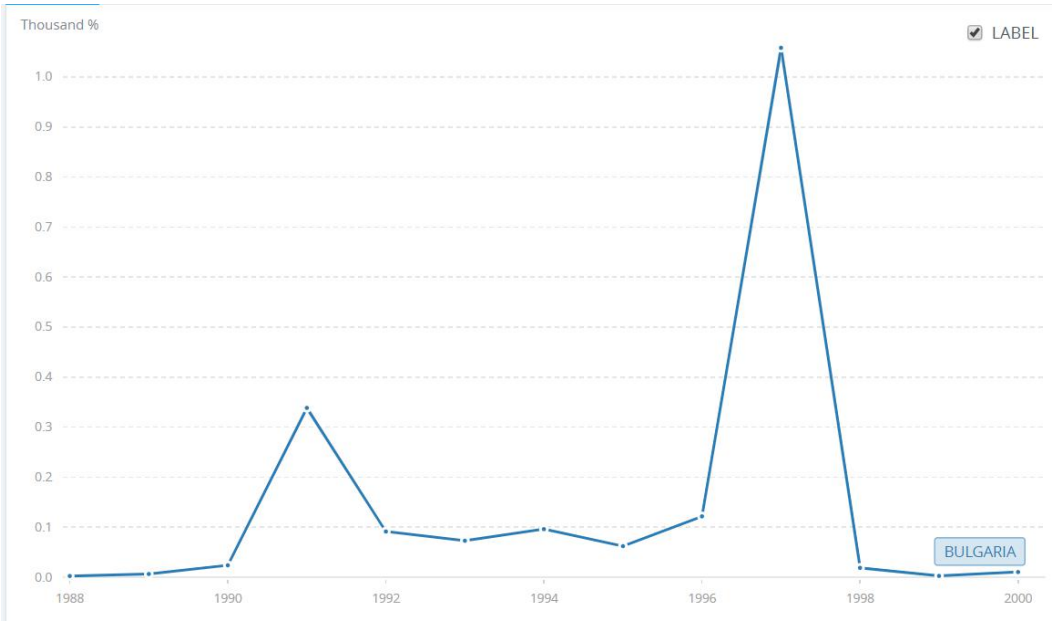
The fiscal crisis was largely due to policy decisions regarding the financial rescue of state-owned firms and banks. This caused the domestic public debt to increase tremendously. In Bulgaria, the law put restrictions on direct central bank lending to the budget. This meant that the central bank of Bulgaria, known as the Bulgarian National Bank (BNB), was limited in its ability to print new currency to cover the government's deficit spending. The government was supposed to finance the deficit through issuing of government bonds. With the growing financial troubles of 1996, pressures for direct borrowing from the central bank grew substantially. Eventually, the BNB ended up buying many of the bonds that the government issued

to finance its deficit. This ultimately had the same impact as if the government had borrowed the money directly (Dobrinsky 2000).

Both of the prior two crises helped create the currency crisis which was considered the core of Bulgaria's financial troubles. This was due in part to the psychological impact of the collapse of the national currency and the special role the exchange rate had in the Bulgarian economy (Dobrinsky 2000). Liquidity injections to support the weak banking system, central bank financing of the national deficit, and the reduced domestic money demand caused by the faltering confidence in the Bulgarian Lev caused the value of the national currency to plummet (Gulde 1999). This, along with the political turmoil at the end of 1996 when the Socialist government resigned, led to the outburst of hyperinflation in 1997 (Dobrinsky 2000).

## Bulgaria's Solution: A Currency Board

**Figure 7: Bulgaria's Hyperinflation**[7]




[7] Figure 7 reproduced from The World Bank; "Inflation, Consumer Prices (Annual %) - Bulgaria."

Figure 7 shows the hyperinflation in Bulgaria from 1996 to the beginning of 1998. The reason for the reduction of inflation was the implementation of a currency board in July of 1997. A currency board, according to Anne-Marie Gulde from the IMF:

> Combines three elements, a fixed exchange rate to an 'anchor currency,' automatic convertibility - or the right to exchange domestic currency at this fixed rate whenever desired - and a long-term commitment to the system, often set out directly in the central bank law (1999; Pg. 5).

In the case of Bulgaria, the anchor currency chosen was the German Mark. Along with this, the BNB stopped direct lending to the budget, ending the refinancing of commercial banks. The BNB also ceased open market transactions, essentially relinquishing its control over to the currency board. The most severe regulation required that monetary authorities always maintain the domestic money base to be consistent with the levels of German foreign reserves (Dobrinsky 2000). Amazingly, this new policy worked, and it worked fast. With the currency board in place, inflation fell to just 13% in mid-1998 and then to 1% by the end of 1998. At the same time, reserves increased tremendously from US$800 million to US$3 billion. Finally, the BNB basic interest rate fell to 5.3% in October of 1998 from being over 200% at the height of the crisis in 1997 (Gulde 1999). According to Gulde, "The Bulgarian experience highlights the power of a credible rule-based system to rapidly changing perceptions and economic behavior" (1999; Pg. 19).

## Conclusion

Studying past examples of hyperinflation allows us to see at least three different ways of successfully fixing the problem: (1) *dollarization* as seen Zimbabwe, (2) *currency reform* as seen in Bolivia, or (3) a *currency board* as seen in Bulgaria.

Dollarization is the process of dropping the national currency that has become hyperinflated and picking up a new, more stable currency from elsewhere, usually the U.S. dollar. Currency reform is the issuing of strict monetary and fiscal policies in order to help stabilize the currency. Finally, a currency board is similar to currency reform in that it aims to stabilize the hyperinflated currency. However, the difference is that the central bank totally relinquishes control to the currency board, putting the board in charge of stabilizing the currency. Each of these options has their strengths and weaknesses, especially in the context of Venezuela. Further analysis on the options Venezuela specifically has to address its hyperinflation will be studied and compared in Chapter Four: Possible Solutions for Addressing Hyperinflation in Venezuela.

# CHAPTER THREE

## Hyperinflation in Venezuela

The unique challenge Venezuela faces combating its hyperinflation, is related to key policy decisions leading up to and during the current crisis. This chapter examines the current situation and what the government of Venezuela has done up to this point to address hyperinflation.

### Why Did Hyperinflation Occur?

According to Steve Hanke, Venezuela's economic plight has been caused by "years of socialism, incompetence, and corruption, among other things" (2019 "Venezuela's Hyperinflation Hits 80,000% Per Year in 2018"; Forbes.com). The story starts when Hugo Chávez came to power in 1998. At the same time the price of oil, Venezuela's main export, was steadily rising and would do so for about a decade. This increased the government's revenue and allowed for more social welfare spending. In 2003, a labor strike at the state-owned oil company crippled the economy lowering GDP by 27% in the first four months of the year. This caused President Chávez to put in place several measures to stop the weakening of the Bolivar, the Venezuelan currency. These measures included the introduction of a currency peg, installation of import controls, the nationalization of other industries, and the establishment of subsidies for food and consumer goods (Friesen 2018). These actions would help right the economy in the short run but had, according to Garth Friesen from Forbes, "sowed the seeds for the future inflation crisis" (2018; Forbes.com).

By 2013, the government was spending considerably more on social programs

intended to address poverty and inequality. These ranged from subsidies for those on low incomes to health services. The Venezuelan government was able to afford the high cost of these programs thanks to its oil exports. Oil accounted for 96% of Venezuela's exports and was responsible for more than 90% of their export earnings (Friesen 2018; Carmody 2018). This all changed when the price of oil crashed in 2014 causing the Venezuelan economy to shrink by 30% over the next three years. Unlike when the country experienced a similar shock in 2003, reliance on imports of consumer goods had increased during the oil price boom. Along with this, domestic production decreased due to years of added regulation and inefficient operations of nationalized industries (Friesen 2018). The crash of oil prices led to a scarcity of many products because foreign demand for the Bolivar fell, causing the value of the currency to decrease, which in turn caused the cost of imports to rise (Carmody 2018).

In March of 2013, Nicholás Maduro succeeded Hugo Chávez as president. Maduro was the pupil of Chávez and held mostly the same views as a result. His solution was to print more money. Economists estimate that the money supply in Venezuela was increasing by 60% yearly until 2013 when it increased more than 76% at the end of January 2014 (Abdou 2020). Printing more money can sometimes help an economy get over the hurdle of a short-term price shock. This was not the case in Venezuela. Oil prices continued to fall and other factors reduced Venezuelan oil output. This caused international investors to pull out of the Venezuelan economy which pushed the value of the Bolivar even lower. Having printed more money, the government had driven the value of the Bolivar down causing prices to increase. As prices rose, the government printed more money to pay its bills. This is the cycle that causes hyperinflation (Carmody 2018).

As the value of the Bolivar fell due to the increase in supply, demand also fell.

This is because holding a depreciating currency for any appreciable amount of time is nonsensical. Citizens of Venezuela began trying to protect themselves by converting their local currency into a more stable one, like the U.S. dollar, which lowered the value of the Bolivar even further. Maduro responded to this by issuing currency controls. He set a fixed exchange rate, to keep the official value of the Bolivar from falling against the value of the U.S. dollar, and made it difficult to gain permission to exchange Bolivars into dollars. His hope was to stabilize the currency by effectively shutting down all currency transactions (Carmody 2018). This did not work, rather, it drove up the demand for greenbacks on the black market which created a difference between the official exchange rate and the unofficial going rate. This created opportunities for individuals who would cross the border, into Colombia for example, and could withdraw funds from the Venezuelan accounts as U.S. dollars at the official rate. They would then cross back into Venezuela and exchange their dollars for Bolivars at the unofficial rate, making a good profit. Government officials even had their own version of this practice. This pushed the price of U.S. dollars up and that of the Bolivar down even more. The process also took the form of taking subsidized Venezuelan goods, like food, across the border to sell. This exacerbated the shortages of goods across the country and increased prices further (Carmody 2018).

In summary, hyperinflation in Venezuela was caused by several factors. These include, according to Garth Friesen from Forbes:

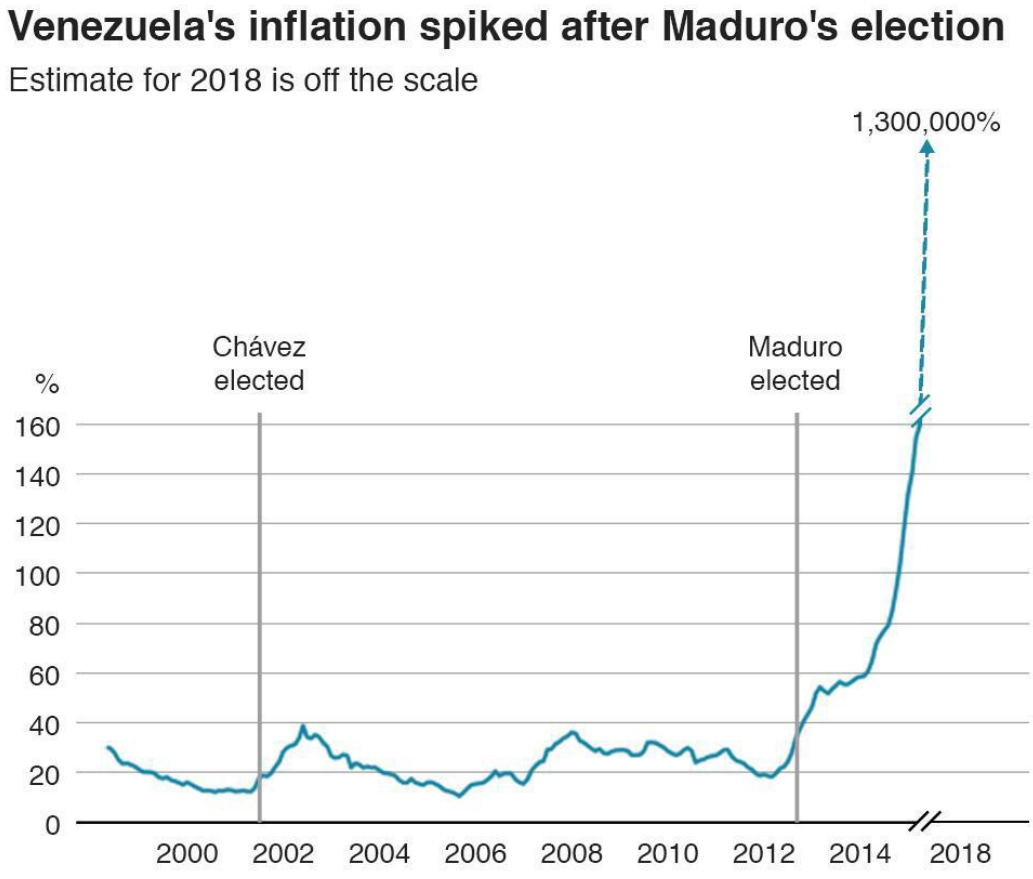
> A mix of government mismanagement and corruption, an undiversified nationalized economy, a reliance on imports for living essentials, no independent central bank and some sort of exogenous shock (2018; Forbes.com).

Along with these would be the response of the government to print more money during the oil price shock. Some sources note that U.S. sanctions, which started in 2015, have exacerbated the issue. While this is true to some extent, other sources,

such as RT, have gone as far to blame U.S. sanctions for the economic and humanitarian problems that Venezuela is facing. It should be noted, however, that RT is a Russian government funded news source that has ties with the Maduro administration, and more importantly, frequently expresses anti-American sentiments. Information from such sources should be taken with a grain of salt but highlight another perspective from which the Venezuelan situation can be seen from. However, the majority of sources support the previous claims of this paper, that it is the combination of being a single export economy and poor monetary practices that led to hyperinflation.

**The Crisis so Far**

**Figure 8: Venezuela's Hyperinflation[8]**




[8] Figure 8 reproduced from BBC News; "Venezuela: All You Need to Know about the Crisis in Nine Charts."

According to Steve Hanke:

> In Venezuela, the monthly inflation rate exceeded 50%/mo back on November 13, 2016 and remained above 50%/mo until December 14, 2016 (32 consecutive days). On December 15, 2016, the monthly inflation rate fell below 50%/mo mark. Then, on November 3, 2017, the monthly inflation rate again exceeded 50%/mo threshold, before falling below the threshold on December 17, 2017 (for 44 consecutive days). So, Venezuela has been engulfed in a hyperinflation episode ever since November 13, 2016, with another flare up of the same episode occurring during the November-December 2017 period (2019 "Venezuela's Hyperinflation Hits 80,000% Per Year in 2018"; Forbes.com).

In 2018 alone, the fiscal deficit accounted for 15% of GDP, GDP shrank by one-fourth, the monetary base grew by 73,000%, prices increased by more than 1.6 million percent, 9 out of 10 Venezuelans were living in poverty, and child malnutrition reached 15% in some states (Huertas 2019). So far around 3 million Venezuelans, a tenth of the population, have fled the country causing the largest human displacement in Latin American history. The Bolivar has become so worthless that it is actually more economically viable to use it as toilet paper than to use it to buy toilet paper (Carmody 2019).

**Figure 9: Price of a Cup of Coffee**[9]

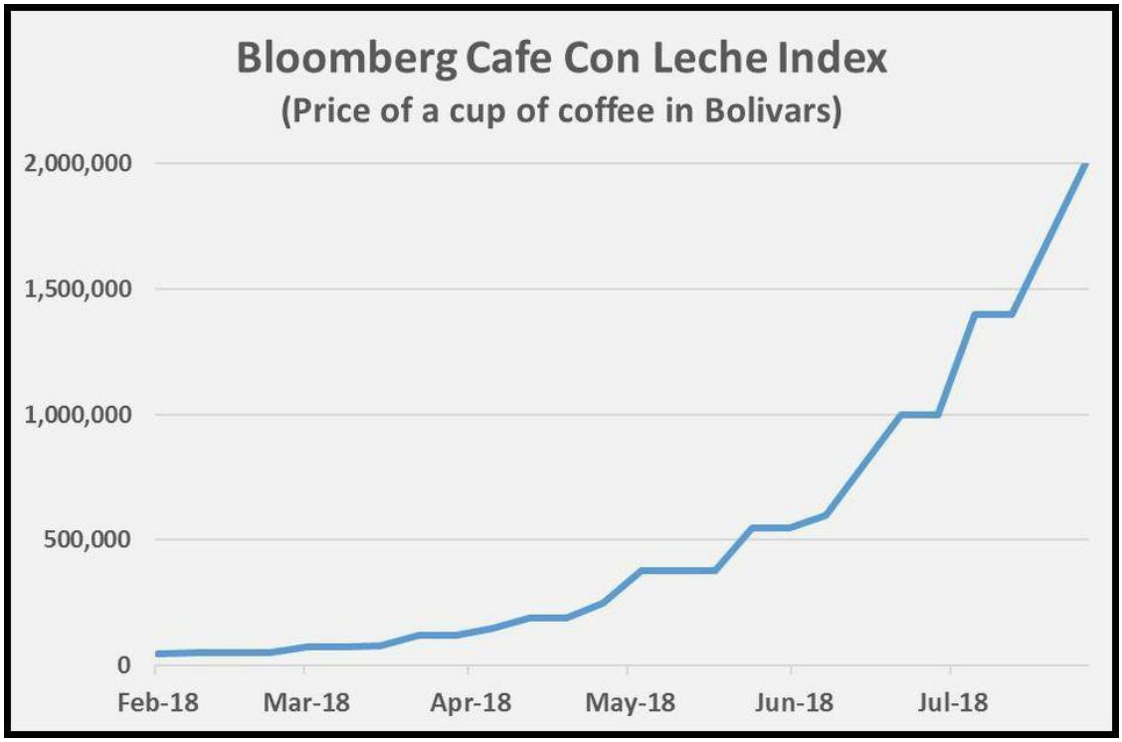



Figure 9 shows the price of a cup of coffee in Bolivars from February 2018 to July 2018. As can be seen, the price is now more the 2,000,000 Bolivars which is up from 1,400,000 Bolivars in July and 190,000 Bolivars in April (Friesen 2018). By the end of 2018, prices were doubling every 19 days on average (BBC Visual Journalism Team 2019).

The Venezuelan government tried to address the hyperinflation through a combination of fiscal, monetary, and exchange rate policies. In mid-2018, the government lifted some currency controls so that citizens and firms could purchase and sell foreign exchange. It also unified and devalued the exchange rate and introduce a new currency, the Bolivar Soberano, at a rate that matched the informal price. This helped narrow the black market spread, the difference between the official rate and the black-market rate. Since 2019, Maduro has drastically reduced

[9] Figure 9 reproduced from BBC News; "Venezuela: All You Need to Know about the Crisis in Nine Charts."

expenditures, increased the value added tax rate, shortened the lags in tax collection from 14 days to 7, increased banking reserve ratios, and removed controls on access to foreign currency while also intervening in the foreign exchange market. At the end of January, the government established a fixed exchange rate anchoring price in Bolivar Soberanos. But, by April, authorities devalued the currency by 57% due to increasing pressure. These policies brought down monthly inflation from around 200% in January to 30% in May, taking the country out of hyperinflation. However, on May 13 monetary authorities forsook the fixed exchange rate in favor of a less managed scheme, although with interventions constantly being made by the central bank. By July hyperinflation had rekindled, returning weekly inflation rates to 10% (Huertas 2019).

**Figure 10: Recent Hyperinflation in Venezuela[10]**


Figure 10 shows the decrease in hyperinflation due to the recent policy changes of the government. While it appears from the figure that inflation has come under control, the annual inflation rate is still 2,430.6% as of March 2020. This is still incredibly high inflation and could become hyperinflation, according to Cagan's

[10] Figure 10 reproduced from Trading Economics; "Venezuela Inflation Rate."

definition, again at any time. This necessitates further action from the Venezuelan government.

## Conclusion

While the Venezuelan government has taken steps to fight its hyperinflation, currently no long-term strategy has been put in place. This is reflected in the fact that expectations of future inflation remain high. The next chapter analyzes how applicable the methods used by other nations to fight hyperinflation are to the Venezuelan situation. The methods in question will be the ones taken from the examples in Chapter Two: Hyperinflation in the Past.

# CHAPTER FOUR

## Potential Solutions for Addressing Hyperinflation in Venezuela

This chapter analyzes the three historically proven methods for fighting hyperinflation discussed in Chapter Two: *dollarization*, *currency reform*, and a c*urrency board*. An explanation of the option in general is detailed, followed by an analysis of the economic and political viability of each option as they apply to Venezuela.

### Dollarization in General

Dollarization is the process by which residents of a country begin to use a foreign currency alongside of or instead of the domestic currency. It can occur unofficially, without formal approval by the government, or officially, in which the government ceases the issuing of the domestic currency and moves to the usage of a foreign one. Although the U.S. dollar is the most common currency adopted through dollarization, other options include the German Mark, the Japanese Yen, and the Euro (Schuler 2000). Generally, however, the dollarizing country chooses the currency of its main trading partner (Hurtado Briceño et al 2019).

Unofficial dollarization occurs when the residents of a country begin to hold most of their financial wealth in foreign assets despite that currency not being legal tender. This includes both cases where it is legal or illegal to hold foreign assets (Schuler 2000). Economists have noted two stages of unofficial dollarization: asset substitution and currency substitution. Recall the basic functions of money as a store of value, means of payment, and unit of account. During the asset substitution stage,

residents move their wealth to foreign bonds and deposits abroad as stores of value. They do so in order to protect themselves from inflation of the domestic currency or, in extreme circumstances, the confiscation of the domestic currency that some countries have made (Schuler 2000). During the currency substitution stage, residents begin to hold large amounts of foreign currency in the domestic banking system, if legally allowed, as stores of value (Schuler 2000). They then use the foreign currency as a means of payment and unit of account. This usually occurs under conditions of high inflation or hyperinflation because the high cost of using the domestic currency prompts residents to look for available alternatives (Berg & Borensztein 2000).

Dollarization can also occur, although rarely, semi-officially. In these officially bimonetary systems, a foreign currency is given legal tender status but takes a secondary role to the domestic currency in the payment of wages, taxes, and everyday expenses. The major difference between officially and semiofficially dollaraized countries is that semiofficial countries retain a domestic central bank and monetary discretion (Schuler 2000).

It should be noted that unofficially and semiofficailly dollarized countries have had veritable economic success but are usually unremarkable. These countries tend to have low quality domestic currencies, hence the need to dollarize in the first place, so preserving their existence shackles economic growth. The laws that require the usage of these domestic currencies for wages and taxes create an artificial demand, even though they are usually highly inflated, among other problems. This weakens the effect of dollarizing for these developing countries (Schuler 2000). Because of this full, official dollarization should be the focus of consideration for Venezuela.

Official dollarization, also known as full dollarization, occurs when the government grants full legal tender status to a foreign currency. This foreign currency

is then used exclusively, or predominantly, for things such as contracts between private parties and in payments by the government. Domestic currency can exist but only in a secondary role, such as issuing coins of small values. While most officially dollarized countries give only one foreign currency legal tender status, some countries have legalized several foreign currencies. This can help reduce the risk of being tied to a foreign currency that starts to become unstable. When a country officially dollarizes it becomes part of a unified currency zone with the country of the currency it is going to use, known from that point as the issuing country. The officially dollarizing country then relinquishes its independent monetary policy and assumes that of the issuing country (Schuler 2000). It is important to understand the permanence, or nearly so, of this decision. It is much harder to reverse dollarization than modifying or abandoning a currency board. The lack of discretion over monetary policy could be a very high price but the permanence is also the main reason dollarization works. Such a decision carries a weight of credibility that can galvanize positivity in the public's expectations of future inflation (Berg & Borensztein 2000).

Full, official dollarization has very real costs but also the potential for many benefits. The main benefit is the reduction of inflation now and the reduced risk of future inflation. Assuming the Yen, Euro, Mark, or Dollar as currency also means assuming their rate of inflation. These currencies are all very stable with single digit inflation rates and global confidence that they will stay that way. Dollarization brings this stability to the dollarizing country (Schuler 2000). Another benefit of official dollarization is lower transaction costs, the cost of exchanging one currency for another, with the issuing country and any other country in the unified currency zone. Other benefits include the guaranteed stability of prices, the creation of both domestic and international financial investment due to the lack of ability to make inflationary

financing, and the elimination of the possibility of currency and balance of payment crises (Schuler 2000; Berg & Borensztein 2000). As mentioned previously, the biggest cost of dollarization is losing monetary discretion. This means that if the issuing country enacts monetary policies that are counter-cyclical, not in alignment with the business cycle, or a shock hits either country, the dollarizing country will have limited options to offset the harms that will befall it. Another cost associated with the loss of monetary discretion is losing the domestic central bank as a lender of last resort. In times of crisis in which domestic banks lack liquidity of funds, the central bank can step in and lend the necessary funds to the bank. However, after dollarizing the central bank no longer has this discretion, or even really exists, so the bank in crisis must either seek lines of credit from the issuing country or suffer the damages. The next cost of dollarization is the loss of seigniorage, the difference between the value a certain denomination of printed money is worth and the amount it costs to print it. This revenue appears as central bank profits, but since the dollarizing country is no longer printing money it no longer makes money from seigniorage. The final cost of dollarization is the loss of a symbol of the nationhood of the dollarizing country, their currency (Schuler 2000; Berg & Borensztein 2000).

**Analysis of Full Dollarization in Venezuela**

Before addressing whether Venezuela should fully dollarize, it is important to know that the country has already been experiencing unofficial dollarization. As mentioned in Chapter Three, Venezuela has been experiencing currency substitution since its citizens saw the value of the Bolivar drop. To add to this, the millions of migrants that have fled the country have been sending around $4 billion annually to their families still stuck in the country (Vyas 2019). It should be noted that the money

sent back is in dollars. Until May of 2019 it was illegal to trade in dollars without special state approval. That was when Maduro ended foreign-currency control for banks, allowing the dollar to circulate freely with the Bolivar (Vyas 2019). This has resulted in the unofficial dollarization of the country as an Ecoanalitca sampling of Venezuela's seven main cities showed that 53.8% of transactions in the first 15 days of October 2019 were in dollars (Kinosian 2019). Maduro had this to say, "I don't see it as a bad thing ... this process that they call 'dollarization,'" noting the economic benefits that come with dollarization. However, he went on to say that, "Venezuela will always have its currency ... we will always have the bolivar and we will recover it and we will defend it," (Kinosian 2019; Reuters.com). This puts Maduro seemingly in favor of unofficial dollaraziation but against official dollarization.

Venezuela's main trading partner is the United States, by a wide margin. The United States imports $11.6 billion and exports $3.45 billion worth of goods to Venezuela. The next country is China with a margin of $5.18 billion and $1.8 billion respectively (Simoes 2011). In addition, as previously mentioned, the history of the economic performance of unofficially dollarized countries is questionable at best and lacking at worst. Maduro seems adamant on maintaining this course of action despite a 2017 survey of public opinion by Datincorp in Caracas find that 62% of the public favored dollarization (Hanke 2019; "Without A Currency Board, Venezuela's Opposition Will Fail"). Yet, the questions of should and could he officially dollarize are still unknown. Therefore, the option to fully abandon the Venezuelan Bolivar and adopt the U.S. dollar will be considered.

Countries that are best suited for dollarization are those that have a poor history of monetary discretion which has created a lack of credibility for the domestic currency. Another important economic factor is the ammount and importance of

seingorage to the considering country (Schuler 2000). Since the citizens of Venezuela don't trust the government to be able to fix the Bolivar, and hyperinflation has rendered the seignorage from the currency to be next to nothing, Venezuela looks like a good candidate for full dollarization (Carmody 2019, Miller 2019). In fact, economics professor Steve Hanke wrote in Forbes, "How can Venezuela pull itself out of its economic death spiral? Venezuela must officially dump the bolivar and adopt the greenback. Official 'dollarization' is a proven elixir" (2019; "Venezuela's Hyperinflation Hits 80,000% Per Year in 2018"; Forbes.com). However, an empirical study of the United States and Venezuela conducted by the Asian Journal of Latin American Studies found next to no, or even a negative, correlation between the two country's business cycles. By having asynchronous business cycles but synchronous monetary policy, dollarizing would open up Venezuela to major risk when faced with shocks that don't also affect the United States. This would increase the cost of domestic fiscal policy and undo the benefits of stability and credibility that dollarizing provided (Hurtado Briceño et al. 2019). The study goes on to state that:

> Empirical results showed that the reduction of inflation and the recovery of price stability that dollarization will bring as benefits are not in balance with the negative correlation levels of GDPpc...[Dollarizing] could increase the vulnerability of Venezuela to external shocks that affect it differently compared to the United States; and could increase the costs associated with the implementation of a stabilization policy after adopting the dollar as legal currency...Thus, the option of dollarizing the Venezuelan economy is considered undesirable. (Hurtado Briceño et al. 2019; Pg. 66; 68)

The political tensions between the United States and Venezuela must also be taken into consideration when considering full dollarization. Official dollarization must be accompanied by market integration in order to be truly successful (Berg & Borensztein 2000). Furthermore, the solution to Venezuela's crisis, "requires a profound revision of the institutions and the political project on which they have their

foundations," (Hurtado Briceño et al. 2019; Pg. 66). Dollarizing could act as a means to reign in the fiscal authorities and impose better monetary discretion. Efforts to revise Venezuela's institutions must include diversifying the country's export portfolio, stimulating aggregate supply, and synchronizing the U.S.-Venezuelan business cycles (Hurtado Briceño et al. 2019).

Without doing so, and considering Maduro's lack of effort towards doing so, dollarizing the Venezuelan economy is not the guaranteed solution most economists would hope for, and might, in fact, do more harm than good. Therefore, Venezuela should not dollarize, but rather should look for other means of fighting inflation, such as currency reform or a currency board.

**Currency Reform**

Since it is unlikely that Venezuela will abandon the Bolivar, a stabilization plan to reduce hyperinflation must be put together. Although the government has taken some steps already towards fixing the Bolivar, much more must be done. Without having a comprehensive plan, the public will never regain trust in their government, making any adjustments less effective. The main pillars of a plan to reform the Bolivar and reduce hyperinflation in Venezuela are fiscal adjustments, financing from abroad, exchange rate policies, and income policies (Huertas 2019).

**Fiscal Adjustments**

Ordinarily, the fiscal adjustments for currency reform during a hyperinflationary episode would be to employ contractionary monetary policy. This includes a reduction in government expenditures, increasing taxes or the tax base, imposing legal limitations on the central bank's ability to provide relief to the

government and state-owned enterprises, and price liberalization (Huertas 2019). However, given Venezuela's concurrent humanitarian crisis, and the continued lack of support from the government over the past few years, it is vital that the country pursue fiscal reallocation as opposed to a reduction in spending. By reallocating wasteful government spending to more important social programs, Venezuela will be able to provide much needed support to their citizens who desperately need it. This will be especially necessary given that many of the proposed reforms could initially make things harder for less fortunate citizens. Future contraction would exacerbate long-term consequences for the country (Huertas 2019).

Reducing subsidies will be of major importance to reallocating spending. As of 2015, subsidies to gas, gasoline, electricity cost Venezuela 5.6% of its GDP, which is roughly $18 billion (Huertas 2019). Doing so corrects the relative prices in these sectors which reestablishes market signals that spurs investment. Reducing subsidies to these areas of the economy will increase the hardship on households, so much of the gains in the reduction of subsidies should go back to the consumers who were benefiting from them (Huertas 2019).

Along with reducing subsidies, the state-owned oil company, the PDVSA, must find a way to increase revenues. As mentioned in Chapter Three, oil production in Venezuela has reached all-time lows. Before the economic crisis, in 2014 the country was producing around 2,700 barrels per day. That number has since fallen to 1,769 barrels per day as of February 2018 and has likely decrased further since then (Nitzberg 2018). On top of this, the government has promised future oil supplies to both China and Russia in exchange for advances on loans. The PDVSA has major legal and financial challenges to overcome in order to increase productivity and revenues. A solution, although somewhat radical, might be to partially privatize the

company. Partial privatization could reinvigorate the company by bringing an influx of funds, supplied by the buyer, that could be used to finance debts, reduce the inefficiency surrounding national ownership of a company, and eliminate corruption (Nitzberg 2018). The hardest part of the plan would be to find a buyer. This is because such a person must have the money to purchase the PDVSA along with assuming some, if not all, of its debts. Given the United States' sanctions that forbid American commercial entities from buying debts connected to the Venezuelan government, the fear that the European Union might impose similar sanctions, and the lack of a buyer in the Middle East, Russia, or China, the most likely buyer would be an English oil company. This is because Britain has separated from the EU and is leaning toward more liberal trade policies that would have been impossible as a part of the EU. An English oil company might have the money and freedom from policies to purchase the PDVSA (Nitzberg 2018).

Obviously, such a plan has the possibility of major political backlash. One way to mitigate it is to highlight the fact that it isn't full privatization that the government is recommending, only partial. Doing so might alleviate some dissent from Maduro's nationalist supporters (Nitzberg 2018). Tensions might not be as tense as they appear, however. In response to U.S. sanctions on Venezuela's oil and the PDVSA, the state increased the exportation of gold out of wildcat mines and turned over operational control oil fields to Russian-controlled Rosneft. This is because Rosneft isn't affected by the U.S. sanctions that prohibit American companies from doing business with state-owned entities (Dube et al. 2020). Despite the contradiction in rhetoric and action, the move was met with little to no disapproval from Maduro's supporters.

Forgoing the political issues that may or may not come up from such a radical idea, if the PDVSA is unable to bring in new revenue, then Venezuela must attempt to diversify its economy to rely less on oil exports. This is because oil has become what is known as a resource curse for the country. By reinvesting revenues in infant industries Venezuela can begin to separate its livelihood with the price of oil. Infant industries are groups of new companies in a country that cannot sell a good for a price that is competitive on the international market. Employing a set of protectionist policies for a specific industry, the government can provide subsidies, tax credits, and tariffs on imports of the good to help them compete and grow (Nitzberg 2018). As the humanitarian crisis has shown, Venezuela has come to heavily rely on the imports of basic good which become scarce. Without protectionist policies, the country will never be able to wane off its reliance on oil and imports. The main industry that the Venezuela should focus on developing is agriculture (Nitzberg 2018). The biggest cash crop of the area is coffee, while the main field crops are sugarcane, rice, corn, and sorghum, and the chief fruits are bananas, plantains, oranges, coconuts, and mangoes. The most important agricultural items for industrial use the country produces are cotton, tobacco, and sisal. Investing in the expansion of some of these crops should be of the highest priority for the government in order to diversify its exports and reduce inflation (Worldmark Encyclopedia of Nations 2020).

**Financing from Abroad**

A stabilization plan of the magnitude needed to fix the Venezuelan economy is going to require funds from abroad. This is especially true given that government spending must remain at the same level, if not higher, to protect citizens from further harm caused by economic reforms. Foreign assistance can come in the form of loans,

grants, or foreign aid and will be used to stabilize prices, provide relief to citizens, finance debts, enhance credibility to the sustainability of reforms, and defend the currency peg, if one is implemented (Huertas 2019). It should be understood that foreign funding cannot be a substitute for structural reform. Without the fiscal adjustments mentioned previously and the exchange rate and income policies that will be mentioned later, explosive prices can and will reappear.

If Venezuela wished to use foreign assistance to bridge the entirety of the fiscal gap, it would cost around $11.5 billion for the first year alone (Huertas 2019). This number fails to account for Venezuela's lack of imports, however. As of 2017 the country imported $9.1 billion worth of goods which is down from $27.5 billion back in 2015. If policymakers determined that imports needed to rise back to this level to reduce food shortages, another $18.4 billion would be needed (Huertas 2019). Normally, a country in Venezuela's position would seek aid from the International Monetary Fund (IMF). Countries that have received IMF assistance have seen greater fiscal flexibility, lower growth rates of the monetary base, and lower exchange rate volatility (Huertas 2019). Under a normal Stand-By Arrangement, Venezuela would be able to request a total of $22.5 billion of which $7.5 billion would be available over the first 12 months. The country would also want to request exceptional access to allow for more of the money to be spent upfront (Huertas 2019). However, whether or not Venezuela can gain IMF support is under question. Not only has Maduro used anti-international financial institution rhetoric which could make accepting loans be seen as a betrayal to Chávez, but the IMF gives preferential treatment towards countries that hold similar economic beliefs with it (Nitzberg 2018). Given the free-market ideology of the IMF and the democratic socialist nature of Venezuela, loans from the IMF might not be possible. It might be more possible than previously

expected given the recent market liberalization Maduro implemented in 2019, however. In May, the government lifted foreign currency controls, as previously mentioned, as well as stopping the enforcement of price controls and ending tariffs on finished goods (Dube et al. 2020). This might not be enough to convince the international community, however, because many see this as just an attempt to maintain political power. Since none of the aforementioned changes are cemented in law, the government could reverse its policies the moment they no longer remain beneficial. This suspicion may be warranted as the country has spun these previously villainized policies to be a clever way to get around U.S. sanctions without it seeming like a complete disassembling of its socialist society, according to an economist advising the government (Dube et al. 2020).

Another way that the Venezuelan government can increase confidence in the IMF, or another foreign investor, to provide loans is to end human rights abuses. Specifically, the state must stop arresting political opponents. Doing so would erase obstacles, such as the scaring off of foreign direct investment (FDI), capital flight of educated human workers out of the country, and economic sanctions, that prohibit the effectiveness of the currency reform policies that it is trying to put in place (Nitzberg 2018). Guaranteeing the freedom of the press, protesters, and political dissenters will go a long way with the international community. Ending human rights abuses is vital to securing the foreign funds necessary to make the currency reform of the Bolivar possible.

The importance of acquiring this foreign financial assistance cannot be understated. As mentioned before, at least some of this money will go towards financing the country's massive debt. With outstanding bonds totaling around $65 to $70 billion that have been in default since 2017, restructuring the debt must play a

major role in the plan to stabilize hyperinflation (Huertas 2019). Although there are some talks in the U.S. about offering Venezuela debt relief, the country must renegotiate the terms of its bilateral loans with Russia and China while also seeking debt relief from the Paris Club (Huertas 2019). By implementing the counter-inflation policies presented in this paper and by ending human rights abuses, Venezuela might be able to gain greater access to funding from abroad.

**Exchange Rate Policies**

Many stabilization plans peg, or use the exchange rate as a nominal anchor, the domestic currency to a foreign currency in order to stabilize the price level and restore a reliable unit of account. Setting a fixed price of the domestic currency in terms of a foreign currency can immediately slow the speed price changes. This pause in price changes can cause a reversal of the Tanzi effect, the reduction of tax revenues due to the rapid deterioration of the value of the collected money from the time lag in receiving the money (Hanke 2018). Finally, a currency peg can grow confidence in the citizens leading an increase in credibility of reforms (Huertas 2019).

A transitionary fixed exchange rate peg to the American dollar might be the best option for Venezuela. If the government can make its currency and fiscal fundamentals sustainable, and if it can procure enough foreign exchange reserves for the central bank to provide liquidity to domestic banks and stave off speculative attacks, then the peg would reduce the possibility of future devaluations. The exact value of the Bolivar Soberano, in terms of foreign currency, should be set according to the weighted average of the existing official exchange rate and the black market rate, with more weight given to the black market rate (Huertas 2019). The chosen rate may need to be overshot, or devalued more than it has to be. This would be in an

attempt to provide some room for prices to increase from the anticipated appreciation that might occur in the short-run. Prices will rise, although far less than before, even after exchange rate policies are set. Not allowing for some breathing room can cause sustained real appreciation, which leads to current account imbalances, and results in a devaluation that could destroy the anchoring of the public's expectations. After a year or more of price stabilization, monetary authorities may consider moving to a crawling peg to keep the real exchange rate from further appreciating (Huertas 2019).

Though many believe in the fixed exchange rate peg, some believe that it would be "political suicide" for Maduro (Nitzberg 2018; Pg. 47). In that instance, a managed float of its currency is recommended. A managed float, "is when a state allows the international currency market to determine the worth of its currency, within a range determined by that country's central bank," and is what most developed countries do, including the United States (Nitzberg 2018; Pg. 49). Such a plan has the central bank set goals for inflation, unemployment, or economic growth and then use various means to affect the money supply in order to push it toward its target. By removing the fixed exchange rate of the Bolivar to the dollar that is currently in place, the black market price and the official price of the Bolivar will come closer together, stabilizing prices (Nitzberg 2018). This process is not instantaneous and affects different parts of the economy disproportionately. The ensuing price dis-coordination will make things harder for lower income residents, necessitating the increase in social welfare programs mentioned previously (Nitzberg 2018).

**Income Policies**

Income policies refer to policies that affect wage and prices. Many stabilization plans contain wage and price freezes in order to deal with the effects of

institutionalized backward-looking expectations of inflation. However, as the inflationary episode moves from simply high inflation to a sustained period of hyperinflation their applicability goes down. Most economists believe that income policies wouldn't play a big role in a stabilization plan in Venezuela (Huertas 2019). Although, some have claimed for the removal of price controls altogether that have plagued industries in the country. This would be in an attempt to decrease food shortages and allow sellers to make a profit from their goods (Nitzberg 2018). Luckily, the government has already removed price controls as of May 2019, which did improve the economic situation of the country although only slightly (Dube et al. 2020).

The immense undertaking that is currency reform should not be taken lightly. In order to gain public confidence and actually reduce inflation rates to sustainable levels, the Venezuelan government, especially Maduro, must assume a higher level of monetary discipline. Otherwise, if things start to go wrong the country will begin financing through money creation which is how they got to this point. Currency reform is definitely a possible option for Venezuela, however it is unlikely to succeed given the country's history of dealing with the crisis. A better solution that removes the need for monetary discipline, thus removing the chance for the government to get in its own way, is a currency board.

**Currency Board**

A currency board arrangement might be Venezuela's best chance to end hyperinflation without sacrificing the Bolivar. A currency board is a visible anti-inflationary policy that is known to garner public confidence which is what a stabilization plan in Venezuela desperately needs. In fact, about 70 countries have

implemented currency boards and none have failed. These countries have experienced lower inflation rates, smaller fiscal deficits, lower debt levels relative to GDP, fewer banking crises, and higher real growth rates compared to countries with central banks (Hanke 2019; “Without A Currency Board, Venezuela's Opposition Will Fail”). They have also empirically done better than other fixed exchange rate policies with studies showing that the mere presence of a currency board lowers annual inflation by about 3.5% due to the “confidence effect”. The confidence effect is the result of the faster growth in money demand due to the increase in institutional certainty that is associated with currency boards (Enoch & Gulde 1998). In addition to gaining the public’s confidence, a currency board solves for the lack of monetary discipline in the Venezuelan government. Although the plan is more extreme than currency reform, the aftermath is less permanent than dollarization. Whereas after dollarizing, the abandoning of the domestic currency is irreversible, a currency board can be undone. While many currency boards operate for decades, some last for much shorter periods of time giving a degree of flexibility not found in dollarizing.

As mentioned in Chapter Two, a currency board is a monetary policy that strips down the functions of the central bank. A currency board is an arrangement in which domestic currency can be issued only to the extent that it is backed by foreign currency reserves. By combining a fixed exchange rate anchored in a foreign currency, guaranteed automatic convertibility of the domestic currency into the foreign currency at the fixed exchange rate, and a long term commitment to the policy by setting it the central banks law, the domestic currency becomes a “clone” of the anchor currency and assumes price stability from it (Enoch & Gulde 1998; Hanke & Wu 2017). A currency board also makes profits from seigniorage in the form of the difference between the interest it earns on its reserve assets and the expense of maintaining its

liabilities (Hanke 2019; “Without A Currency Board, Venezuela's Opposition Will Fail”). It is important to stress that, while a currency board has exchange rate policies it does have monetary policies. Its operations are automatic and passive and it has no monetary discretion. This means that the quantity of domestic money in circulation will be solely determined by market forces. Also important to note is that the central bank will no longer be able to be the lender of last resort to banks and cannot finance government spending.

Implementing a currency board in Venezuela is vital and politically favorable. A study conducted by the Johns Hopkins Institute for Applied Economics, Global Health, and Study of Business Enterprise found that 59% of the Venezuelan people support replacing the central bank with a currency board (Hanke & Wu 2017). Clearly the people of Venezuela are ready and looking for major change in the country’s currency regime. Doing so would smash inflation in 24 hours establishing stability over night (Hanke 2019; “Without A Currency Board, Venezuela's Opposition Will Fail”). The ability to be established quickly is one of the best features of a currency board and should be a major draw for the government’s consideration. The government’s finances, state-owned businesses, and trade can be reformed after a currency board is in place and issuing money without major concern (Hanke & Wu 2017).

Still, some things still need to be accounted for before the currency board can begin. First a foreign currency must be chosen as the peg for the domestic currency. In the history of currency boards, the majority have pegged to the U.S. dollar, while a few have chosen the Deutsche Mark, and one used the Singapore dollar (Enoch & Gulde 1998). Theoretically, a peg could be made using a basket of different foreign currencies. However, no country in the past has chosen such an option because it

makes things more complicated. A currency basket is usually only considered if the value of a country's trade is roughly equal between two currency blocs (Enoch & Gulde 1998). Given this and the fact that the U.S. is Venezuela's main trade partner, the U.S. dollar should be chosen for the fixed exchange peg. Much of the same policy implications about the fixed exchange peg apply from the section on currency reform and should effect policy makers' decisions for that of the currency board. In addition, the credibility of the currency board relies on the availability of foreign currency reserves. With foreign reserves in the country at an all-time low, obtaining foreign funding will still be as important as it was with currency reform. All of the same ideas can be carried over as eliminating humanitarian abuses should be of a top priority in this respect. The government should also follow the guidelines for fiscal reallocation and increasing social welfare programs in order to protect its poorer citizens. Finally, Maduro must put the policies of the currency board into law. Failing to do so undermines the entire arrangement and will forgo the gaining of the public's confidence (Enoch & Gulde 1998).

Many economists believe in the necessity and possibility of success of a currency board in Venezuela. Economist Steve Hanke has both said that, "That's why a currency board is a vital first step for Venezuela," and that, "A second sure-fire method to stop Venezuela's death spiral would be to adopt a currency board system," (Hanke 2019 "Without A Currency Board, Venezuela's Opposition Will Fail"; Forbes.com; Hanke & Wu 2017; Pg. 5). A currency board would fix hyperinflation while retaining the Bolivar, removing the chance for poor monetary discipline to get in the way, and giving the people what they want, thus avoiding political tensions. A currency board is Venezuela's best option both economically and politically for fighting inflation.

## Conclusion

Three plans for combating hyperinflation in Venezuela were detailed and then analyzed. Dollarization has a history as a proven method for fighting hyperinflation. However, in the context of Venezuela, it's just not right economically nor politically. Due to the nature of the business and inflation cycles of the United States and Venezuela not lining up, assuming the monetary policy of the Federal Reserve will likely result in the wrong policies being in place at the wrong time for Venezuela. This will lead to destabilization and a resurgence of inflation. The option is further put down by the extreme anti-American rhetoric of Maduro. To assume the currency of the enemy would be a defeat that the leader might not recover from. There is also the fact that the president has said that the country will always have the Bolivar and that they will fix it. This leaves the options of currency reform or a currency board which don't require the country to abandon the Bolivar. While both are economically and politically viable, a currency board is the better option for the country. This is because of the lack of monetary discipline displayed by the Venezuelan government and the lack of public confidence in the government to solve the economic and humanitarian crises. The strict nature of a currency board ensures public confidence in the policy due to the fact that it is codified in law. In addition, being the law means that the government cannot easily interfere with the currency board, allowing it to do its job of fixing the Bolivar. For these reasons, Venezuela must implement a currency board as described in this paper and by economists around the world in order to reign in hyperinflation and provide relief to its citizens.

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